TMCM-163

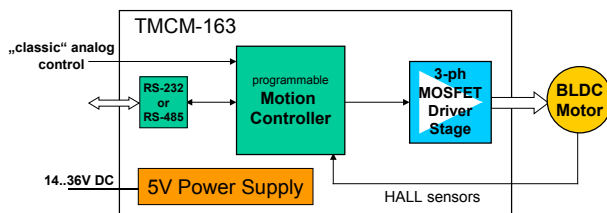## 1-Axis Motor Mounted BLDC Controller / Driver 12A / 38V

10 mm

INFO The TMCM-163 is a controller / driver module for general brushless DC motor applications. It integrates velocity and torque control as well as a hall sensor based positioning mode. The position resolution depends on the motor, i.e. a standard 8 pole motor gives a motor axis resolution of 15 degrees. The module can be used in stand alone operation (analog voltage) or remote controlled (TMCL) via RS-232 or RS-485 interfaces (ordering option). Its small form factor (43 x 43 x 20 mm³) allows for mounting directly at the motor. The TMCM-163 fits perfectly to the QBL4208 BLDC motors.

MAIN CHARACTERISTICS

ELECTRICAL DATA
- up to 12A coil current (contact to cooling plane might be required using gap pad)
- 14V to 38V motor supply voltage
- NEMA 17 mounting configuration

SUPPORTED MOTORS
- three phase BLDC motors with hall sensors from a few watts up to 360W
- velocity up to 100,000 rpm (el. field)

INTERFACE
- RS232 or RS485 host interface
- analog and digital control inputs

FEATURES
- constant velocity drives, constant torque drives or positioning
- on the fly alteration of motion parameters (e.g. position, velocity, acceleration)
- high efficiency, low power dissipation
- integrated protection: overload / overtemperature

SOFTWARE
- stand-alone operation (analog voltage) or remote controlled operation (TMCL)
- PC-based demonstration software allows setting of all parameters

OTHER
- pluggable connectors for interface
- flat connectors for motor and supply
- RoHS compliant
- size: 43 x 43 x 20 mm³ (two stacked PCBs)

TMCM-163

„classic" analog control

| RS-232 or RS-485 | programmable Motion Controller | 3-ph MOSFET Driver Stage | BLDC Motor |

14..36V DC → 5V Power Supply

HALL sensors

ORDER CODE	DESCRIPTION
TMCM-163 (-option) V2	1-axis BLDC controller / driver module 12A / 38V
TMCM-163-CABLE	Cable loom for TMCM-163
Related products:	QMot QBL 4208
OPTIONS	
232	RS-232 interface
485	RS-485 interface

www.trinamic.com – for detailed information and datasheets